

# Feedback Distortion: The Shortcomings of Model Answers as Formative Feedback

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## I. INTRODUCTION

Imagine you had no prior musical training but decided to take violin lessons one summer. You spent several months with the teacher talking about reading music and thinking about where to put your fingers and how to draw the bow. The teacher gave you a short etude to work on for a few weeks. Then came the summer recital, where you had to put everything you'd learned into practice. You played the best you could, but you weren't great. You didn't have the tempo right. Your vibrato was all wrong. And your notes were mostly sharp. But imagine that instead of offering you that type of feedback in class the following week, your teacher simply said, "It should have sounded more like this" as she played an Itzhak Perlman CD. "Better luck next time."

When a professor provides a student with a model paper or model exam answer to review instead of individualized feedback, is that the equivalent of handing a novice violin player an Itzhak Perlman CD?

For many law professors, especially those teaching large classes, the reality of providing individual feedback to each student on every paper or exam is daunting. So instead, in place of individual feedback, many professors post model answers after assessment events like writing projects, midterm exams, or final exams.<sup>1</sup> The assumption is that a student can compare his own work

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1. These are common assignments for which a law professor would provide a model answer for students to review after the fact. They are each an opportunity for the professor to assess the skills and knowledge of students, so throughout this article I refer to each of these types of projects, often interchangeably, as assessments. As the American Bar Association (ABA) requires faculty to provide more assessment opportunities for students, faculty may feel burdened by the additional pressure and added assessments. In order to alleviate that burden, faculty may be more likely to provide students with samples as feedback instead of individualized feedback. See *infra* notes 18 and 19, and accompanying text, regarding the ABA's new assessment requirements.

to the posted model and assess his strengths and weaknesses. By seeing the problem done right, he'll understand what he did wrong. Hopefully, the student will also understand the grade the professor assigned and not take up valuable time asking for explanations.

Providing model answers as a method of providing feedback is an offshoot of the Vicarious Learning and Self-Teaching models of education, which have pervaded legal teaching since the nineteenth century.<sup>2</sup> Under the Vicarious Learning Model, students are supposed to learn in class by watching other students interact with the professor.<sup>3</sup> The most obvious display of the Vicarious Learning Model is the traditional law classroom setting in which a professor engages in a one-on-one dialogue with a student. Though the professor focuses on a single student in that interaction, the idea is that the rest of the students are playing along by answering the professor's questions in their head. By playing along, those students will learn vicariously from the single student's learning, internalizing the concepts and corrections in understanding from that dialogue.<sup>4</sup>

A professor who provides a model answer as feedback engages in the Vicarious Learning Model, too. In both cases, the professor intends that a single student's knowledge and learning will "rub off" on the remainder of the class.<sup>5</sup> The student who "gets it" provides a model from which other students should learn. Even if the professor writes the model answer herself, she will be performing in the role of the outstanding student, and the vicarious learning theory is the same.

Like the Vicarious Learning Model, the Self-Teaching Model puts the onus on the student. Under the Self-Teaching Model, the professor expects a student to learn on his own what he needs to learn and do.<sup>6</sup> Surely, classroom discussion is designed to help advance a student's learning in legal theory, analysis, and writing. But not all professors are explicit about which of their classmates' comments are on the right track. And few professors are transparent about the skill being exercised in any given discussion. Did the professor most highly value the student's accurate recitation of the facts or his ability to apply the rule of a case in a new hypothetical? Students listening to a professor-

2. Michael Hunter Schwartz, *Teaching Law by Design: How Learning Theory and Instructional Design Can Inform and Reform Law Teaching*, 38 SAN DIEGO L. REV. 347, 350-51 (2001).

3. *Id.*

4. *Id.* But see Lani Guinier et al., *Becoming Gentlemen: Women's Experiences at One Ivy League Law School*, 143 PA. L. REV. 1, 46-47, 61-68 (1995); Gerald F. Hess, *Heads and Hearts: The Teaching and Learning Environment in Law School*, 52 J. LEGAL EDUC. 75, 81-82 (2002); Benjamin V. Madison III, *The Elephant in Law School Classrooms: Overuse of The Socratic Method as an Obstacle to Teaching Modern Law Students*, 85 U. DET. MERCY L. REV. 293 (2008); Myron Moskowitz, *Beyond the Case Method: It's Time to Teach with Problems*, 42 J. LEGAL EDUC. 241 (1992); Judith Welch Wagner, *Reframing Legal Education's "Wicked Problems,"* 61 RUTGERS L. REV. 867, 925-33 (2009).

5. Schwartz, *supra* note 2, at 351.

6. *Id.* at 352.

student dialogue are left to divine the skills being taught and then to sort through the dialog to distill the crucial points for themselves.

Similarly, with model answers as feedback, professors expect a student to know what theory or skills he needed to have learned and to decipher what was effective about the model. Then, based on the model, the student must assess his own work. That requires the student to work on three levels: First the student needs to determine which skill was of value in the model. Is the model effective because it came to the right conclusion? Because it identified the right cases to explain the law? Because it was organized clearly? Because it was grammatically correct? Second, with the valued skill in mind, the student must then determine why it was correctly demonstrated in the model. Third, the student must be able to compare and contrast his own work to the model answer.

But can students do that vicarious, self-learning work effectively? Does a model answer effectively provide feedback?

As with nearly every question in law school, the answer is: It depends. Using model answers as a method of providing feedback can be effective, depending on the pedagogical goal. If the professor's goal is simply corrective—for example, conveying that intent is an element of assault—a correct model can convey that. However, for most purposes where the pedagogical goal is more complex, providing a model answer in the absence of individualized feedback will not further student learning. And the more flawed a student's understanding of the information is, the less likely the model is to help correct that understanding. That means that the student who needs the most feedback will likely learn the least from a model.

In her article, legal writing scholar Terrill Pollman applies the cognitive-load theory to conclude that students learn more easily through examples than by problem solving.<sup>7</sup> This article will not further address examples as a

7. See, e.g., Terrill Pollman, *The Sincerest Form of Flattery: Examples and Model-Based Learning in the Classroom*, 64 J. LEGAL EDUC. 298 (2014). Professor Pollman, a legal writing scholar, concludes that students learn more easily through examples than by problem-solving, as a result of cognitive load. *Id.* at 298-300. Through the use of modeling and worked examples—which are not necessarily the same as model answers—a law professor can lighten the cognitive load for novice learners, freeing up capacity in the learner's working memory. *Id.* In a writing class, this is particularly important because students are expected to learn legal analysis while learning the conventions of legal writing. *Id.* at 299. Simultaneously tackling two tasks overloads working memory. *Id.* But by using worked examples and modeling, a law professor can segment the concepts that a student must master, easing the cognitive burden. *Id.* at 315-19.

Professor Pollman distinguished worked examples, which are step-by-step explanations of problem solutions, from modeling, where novice learners observe an expert completing a task, and found that worked examples are more effective in some learning contexts than others. *Id.* at 305-06. For example, novice students learn more from weaker worked examples, while more sophisticated learners benefit from stronger worked examples. *Id.* at 315-19. But as students gain expertise, worked examples can be counterproductive; experts learn more from problem-solving than studying worked examples. *Id.* at 309, 322, 328. Second,

teaching tool early in the process of introducing new concepts or paradigms, or in developing analytical or writing skills.

Instead, this article addresses the separate question of whether the use of models can be an effective method for conveying feedback for law school exams and papers. Part II of this article will explain the various purposes of giving feedback. After all, professors have both pedagogical and practical justifications for offering a model answer as feedback. Part III will explore the costs of using models as feedback. More specifically, it explains how students tend to understand model answers and finds that metacognitive and mindset barriers prevent some types of students from learning from model answers. In short, weaker students tend to misinterpret model answers and are less capable of accurately assessing their own work against the model. And finally, Part IV will offer suggestions for using models more effectively to provide feedback. Model answers can be an expedient and illustrative way of demonstrating a theory, principle, or skills, but to be effective they must be paired with additional information like detailed grading rubrics or required professor-student or peer conferences.

## II. PURPOSE OF FEEDBACK

### *A. Instructional Goals and Learning Objectives*

Feedback should be designed to meet the professor's instructional goals and further student learning objectives. Each law school course, unit within the course, or lesson within a unit has a purpose; in ABA parlance, this purpose is called a learning goal.<sup>8</sup> A learning goal might be something concrete, such as, "students should be able to identify the elements of first-degree burglary," or it could be more abstract: "A student should be able to extract an implicit rule from a case." When professors assess students, the goal is to determine whether each student met or achieved the learning goal.<sup>9</sup> Thus, the form of assessment should be tied closely to the learning goal. And in turn, the feedback that

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having students study multiple examples that demonstrate the same principles but in varied contexts helps facilitate transfer. *Id.* at 314, 321-22. Finally, students learn more from worked examples when prompted to engage in self-explanation, which means generating inferences from the material and incorporating them into one's own schema. *Id.* at 324-25. Without such prompting, students tend to create superficial self-explanations or none at all. *Id.* See also, Christine N. Coughlin, Lisa T. McElroy & Sandy Patrick, *See One, Do One, Teach One: Dissecting the Use of Medical Education's Signature Pedagogy in the Law School Curriculum*, 26 GA. ST. U. L. REV. 361, 388-89 (2010); Anne Enquist, *Critiquing Law Students' Writing: What the Students Say is Effective*, 2 LEGAL WRITING 145, 189 (1996); Helene S. Shapo & Mary S. Lawrence, *Surviving Sample Memos*, 6 PERSP. 90 (1998).

8. Schwartz, *supra* note 2 at 394.
9. PATRICIA L. SMITH & TILLMAN J. RAGAN, INSTRUCTIONAL DESIGN 104 (3d ed. 2005). Smith & Ragan note that a second goal of assessment is to rank a student among his classmates, but that is unrelated to the idea of feedback. *Id.* at 103-07. A professor could rate or rank students in the class without relaying a single piece of information back to the students. *Id.*

a student receives in response to the assessment ought to identify areas of strength and weakness related to that learning goal.

Professors have different goals in providing students with feedback about their work. The type of feedback a professor should provide would depend on the learning goal for the course, unit, or lesson. Sometimes the goal is to provide more general feedback that a student can transfer to a new project in the future. Sometimes the intent is to correct an objective knowledge error. And, of course, a professor will often have multiple goals when providing feedback (i.e., she seeks both to correct an error and to provide general transferable information for future projects).

### *B. Types of Feedback*

Feedback can accomplish multiple purposes but falls into two primary categories: It can be formative or summative.<sup>10</sup> The purpose of formative feedback is to further the student's learning. That is, the reviewer identifies the student's problems while suggesting ideas for improvement. That feedback can be evaluative, judging a student's performance according to a set benchmark, and descriptive, making specific references to a particular student's work or ability.<sup>11</sup> It should be specific to the quality of the student's work and should provide guidance for improvement, but it should not compare the student's work to her classmates' work.<sup>12</sup> A professor's primary goal in providing formative feedback is not to rank or rate the work (though the work might be ranked or rated in order to have a grade assigned), but to help the student work toward continued improvement in her writing or analysis. A midterm exam and a required paper draft are examples of opportunities for formative feedback.

Feedback is not truly formative unless it helps a student develop her learning strategies or knowledge to a higher degree than before the particular assessment event.<sup>13</sup> For formative feedback to be effective, three conditions must be present: A student must (1) understand the goal or standard aimed for in the assessment; (2) compare his actual level of performance against that goal or standard; and (3) take appropriate steps toward closing the gap.<sup>14</sup> For that to take place, of course, a student must have the knowledge or expertise to distinguish between the standard and his own performance and to determine which steps to take for continued improvement.

10. Nancy Soonpaa, *Using Composition Theory and Scholarship to Teach Legal Writing More Effectively*, 3 LEGAL WRITING 81, 97 (1997).

11. FEEDBACK FOR LEARNING 21 (Susan Askew ed. 2000).

12. Paul Black and Dylan Wiliam, *Inside the Black Box: Raising Standards through Classroom Assessment*, 80 PHI DELTA KAPPAN 139, 143 (1998).

13. FEEDBACK FOR LEARNING, *supra* note 11, at 21.

14. *Id.* at 34; D. Royce Sadler, *Formative Assessment and the Design of Instructional Systems*, INSTRUCTIONAL SCI. 119, 121 (1989).

Therefore, a professor's goal in providing formative feedback should be to help identify the gap between the standard and a student's current performance and guide him toward the appropriate steps. With the appropriate feedback, a professor giving formative feedback intends that the student will continue to learn from the feedback and his mistakes. The formative comments, a professor hopes, will then transfer to the next draft of the paper, the final exam, or the next project. Formative feedback coincides with a process-oriented method of teaching because it is not focused on assessing the correctness of the final product, but on the process of continued learning.

By contrast, summative feedback, which coincides with a product-oriented approach to teaching, evaluates the student's work as a final product at the end of an instructional unit.<sup>15</sup> Summative evaluations are meant to rate and rank a student's knowledge or performance as of the date of the exam or paper's due date—considering a student's ability fixed at that moment—but not to provide feedback for continued learning.<sup>16</sup> A final exam, final paper, or final project, as traditionally conceived, would yield summative feedback: a final grade. Under this approach, it's as if the course is coterminous with learning the course material.

A professor can provide both formative and summative feedback on the same assessment; she need not choose between one or the other. That is, a professor can evaluate a student's learning at the end of the instructional unit, rating and ranking it against a standard, while also providing feedback that promotes continued learning. For example, a professor who identifies the weaknesses and strengths of the project for the student's continued learning while giving the student a final score or grade has provided formative and summative feedback, respectively.

Whether a professor should provide both formative and summative feedback depends, perhaps, on the professor's philosophy of assessment. A professor who views an assessment event merely as a test of a student's existing knowledge may think summative feedback is appropriate and sufficient, while a professor who views assessment as an opportunity for continued learning should seek to provide formative feedback. However, those among the former who use assessment only for summative purposes miss many important opportunities.

### *C. Feedback and ABA Accreditation Requirements*

While each individual professor may choose whether to provide summative or formative feedback in her own course, every accredited law school must incorporate formative feedback in its curriculum. As law schools have grappled with the many critiques of legal education over the past decade—including that

15. Brooke K. Horvath, *The Components of Written Response: A Practical Synthesis of Current Views*, 2 RHETORIC REV. 136, 137 (1984).

16. *Id.*

students are not entering the profession “practice-ready,”<sup>17</sup>—the American Bar Association revised its accreditation standards in 2014 to require law schools to provide opportunities for both formative and summative assessment.<sup>18</sup> The assessments must be designed “to measure and improve student learning and provide meaningful feedback to students.”<sup>19</sup> The new requirement should lead professors to provide more feedback than the traditional final letter grade at the end of the semester, which would be summative feedback. Students need—and are now entitled to under the ABA Standards—more and better feedback throughout the curriculum.

The ABA is not the only driving force behind additional assessment in law schools. In fact, the ABA’s requirement is but an aftershock of the national shift toward assessment at every level of education. At the higher level, many universities are driving their law schools to create institutional assessment plans in order to comply with university-level accreditation bodies.<sup>20</sup> The regional accreditation bodies are governed by the U.S. Department of Education, which ties federal funding to accreditation.<sup>21</sup> More specifically, since 1988, federal funding has hinged on assessments.<sup>22</sup> In 1988, the Department of Education ordered each regional accreditation body to require institutional outcomes assessment in its accreditation standards.<sup>23</sup> To be accredited, universities had to create learning outcomes for each educational program and a plan for assessing outcomes and using the assessments for continued programmatic improvement.<sup>24</sup> In the ensuing decades, amid controversy over excessive regulation, the regional accreditors have continued to press outcome assessments, and many universities have responded by creating assessment plans.<sup>25</sup>

While the ABA, some regional accrediting bodies, and many universities have been specific in their requirements for formative and summative individual assessment opportunities, the requirement is not prescriptive. Under the ABA,

17. See, e.g., WILLIAM M. SULLIVAN ET AL., *EDUCATING LAWYERS: PREPARATION FOR THE PROFESSION OF LAW* (2007) (commonly known as the “Carnegie Report”).
18. AMERICAN BAR ASS’N, *Standard 314: Assessment of Student Learning*, in *STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS 2014-2015* 23 (2014). In addition to Standard 314, Standards 301(b), 302, and 315 all relate to assessment, though without the same focus on individual student assessment.
19. *Id.*
20. LORI E. SHAW & VICTORIA L. VANZANDT, *STUDENT LEARNING OUTCOMES AND LAW SCHOOL ASSESSMENT* 22-23 (2015).
21. *Id.*
22. *Id.*
23. *Id.*
24. *Id.*
25. *Id.*

each law school may follow its own path in creating new opportunities.<sup>26</sup> And not every new opportunity has to blaze a new trail. Though traditional methods of assessment, like midterm exams, final exams, and final papers, are traditionally considered summative, professors can change the way they evaluate those projects in order to provide formative feedback for continued learning.

### III. MODEL ANSWERS AS A METHOD OF PROVIDING FEEDBACK

Model answers are a common method for delivering feedback to students, but they are not particularly effective. A number of students—particularly the weaker students most in need of formative feedback—will be unable to accurately glean the standard or goal exemplified by the model answer or to distinguish their own work from the model. Nevertheless, model answers are distributed to students after an assessment for a number of reasons. This section will explore the many reasons professors may choose to use model answers and some of the reasons they are not effective for conveying formative feedback.

#### *A. When and Why Professors Use Models*

In legal education, professors use model answers in a variety of contexts and for a number of reasons. In a writing class or a course with a writing component, a professor might provide a model answer to students after they've completed the final paper. In courses with exams, professors might provide model answers to students after the exam has been graded, whether the exam is a midterm or a final. In each of these contexts, the professor's offering represents a standard of achievement; that standard provides feedback to the student: "Here's what your product should have looked like." Providing the model answer is intended to be formative rather than summative because the professor seeks to improve the student's learning, rather than simply to rate it.

Professors choose to provide students with model answers as a method of conveying formative feedback for many reasons. Some of the reasons are student-focused, while others reflect the practical limits of teaching. First, some professors believe that providing a student with a model encourages a student to self-teach,<sup>27</sup> which is a valued skill for a practicing lawyer. A student who can teach and assess himself from a model will better develop his own independent

26. *Id.* Interpretation 314-2 states, "Assessment methods are likely to be different from school to school. Law Schools are not required by Standard 314 to use any particular assessment method." *Interpretation 314-2*, in STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS, *supra* note 18, at 23.

27. See Mark Huxham, *Fast and Effective Feedback: Are Model Answers the Answer?* 32 ASSESSMENT AND EVALUATION IN HIGHER EDUC. 601, 603 (2007) ("model answers require some active engagement of the student . . .").

critical ability independent from the judgment of a professor.<sup>28</sup> And indeed, self-learning skills are crucial for lawyers, who cannot possibly learn all of the law they will need in practice. This justification echoes the reasoning behind the Vicarious Learning and Self-Teaching methods discussed above.<sup>29</sup>

Second, professors may provide models to respond to student requests.<sup>30</sup> Law students clamor for examples and think their professors are “hiding the ball” when examples are not provided. Third, providing a model answer might expedite feedback because a professor needn’t comment on every student’s work. Quick feedback is both responsive to students’ requests for faster turnaround and more effective than providing feedback after a long lag.<sup>31</sup> Fourth, providing a single model answer instead of individual feedback reduces the risk of alienating students with excessive negativity or perceived personal critiques.<sup>32</sup>

Some professors provide model answers for reasons that are more realistic than altruistic. Providing a single model answer is significantly more efficient than providing individual feedback on each student’s work. With larger class sizes or classes with frequent assessment, providing individual feedback can be daunting. Providing a model answer also requires significantly less professor training and preparation because a professor doesn’t have to spend time learning effective ways to provide feedback. The professor can either write a single model answer and provide it to the class or, even more simply, select the work of a high-performing student to put on display. The learning burden is then on the student rather than the professor, freeing the professor to focus on other tasks.

### *B. How Students Interpret the Feedback from Model Answers*

A professor’s goal in providing a model answer is to provide formative feedback to the students. After all, a professor gives summative feedback simply by assigning a grade or score to the exam or paper. By providing a model answer, the professor intends that the student will continue learning by remediating deficits in knowledge or skill. The effectiveness of that feedback—whether a student can use the model answer to assess his own strengths and weaknesses and whether a student can improve his knowledge based on that feedback—depends on two variables. First, effectiveness will depend on the particular characteristics of the student. Novice learners who lack expertise in the tested subject matter and students with a fixed mindset are significantly

28. See Karen Handley & Benita Cox, *Beyond Model Answers: Learners’ Perceptions of Self-Assessment Materials in E-Learning Applications*, 15 *ALT:J RES. IN LEARNING TECH.* 21, 22 (2007) (“The proposed benefits of self-assessment are that students are encouraged and empowered to develop their own critical faculties . . .”).

29. Schwartz, *supra* note 2, at 365.

30. Helene S. Shapo & Mary S. Lawrence, *Surviving Sample Memos*, 6 *PERSP.* 90, 90 (1998).

31. Huxham, *supra* note 27, at 603.

32. *Id.*

less capable of making productive use of model answers. Second, effectiveness will depend on the type of knowledge being assessed. Model answers can provide effective feedback for questions of factual knowledge and concept identification. But with assessment that requires higher-order thinking, where students are required to demonstrate a thought process, models are not as effective. Moreover, regardless of student characteristics and learning goals, students themselves do not think model answers provide helpful feedback, despite frequent requests for them. Students prefer individualized feedback and admit that they do not learn as well from a model.

### 1. Metacognitive Skills and the Problem with Self-Evaluation

Whether a model answer can effectively convey formative feedback depends, in part, on the characteristics of the student reading it. Some students may be able to glean the relevant information and improve their own learning from reviewing a model answer, but many cannot. In particular, the affective learner characteristics of students can make model answers less effective teaching tools. Affective learner characteristics include a student's sense of his own academic capability and "attributions of success or failure."<sup>33</sup> These characteristics should inform a professor's instruction design, including the type of feedback a student should receive. Students who are less capable of correctly gauging their own academic capability and students with fixed mindset require individualized feedback. This section will discuss the utility of model answers in both student populations.

#### *a. The Inability to Self-Assess*

The research about metacognition is fairly clear: People are not very good at estimating their own ability and evaluating their performance.<sup>34</sup> Metacognition is the "knowledge of one's own cognitive processes (i.e., knowing what one knows) and state of knowledge."<sup>35</sup> Metacognitive skills give us the ability to evaluate our own academic capability, to self-assess.<sup>36</sup> And metacognitive skills are not distributed evenly among us. That is, we're not all equally bad at knowing what we know.

Students who perform well on assessments tend to have stronger metacognitive skills. They can tie their level of confidence to successful performance with fair accuracy; they are pretty good at identifying what they do know and do not know.<sup>37</sup> Yet they are still not excellent predictors of their

33. Schwartz, *supra* note 2, at 388.

34. See, e.g., Frank J. Sinkavich, *Performance and Metamemory: Do Students Know What They Don't Know?*, 22 J INSTR. PSYCHOL. 77 (1995).

35. *Id.*

36. See discussion of the Vicarious Learning and Self-Teaching method *supra* pp. 938-39.

37. Sinkavich, *supra* note 34, at 77-78.

own ability. Top performers tend to underestimate their capability.<sup>38</sup> Though they can fairly accurately estimate their own knowledge and accuracy, they assume they will perform less well in comparison to their peers than they actually do.<sup>39</sup> By overestimating their peers' ability, they think of themselves as more average than they are.

In contrast, those who perform poorly on assessments generally tend to have the weakest metacognitive skills—they are least able to accurately self-evaluate.<sup>40</sup> That means students who perform at the bottom of a law school course would be least accurate in predicting how much of the course material they knew and how well they knew it. Poor performers tend to convey a sense of confidence in their knowledge that belies their actual knowledge.<sup>41</sup> Whereas top performers underestimated their abilities, performers in the bottom quartile tended to overestimate their performance by an average of fifty percentage points.<sup>42</sup>

Owing to their lack of expertise, poor performers are first unable to produce a skilled or correct response, and then, through that same lack of expertise, unable to see that their work is inadequate. In study after study, people performing at the bottom of the curve estimated their own ability and performance at above the median.<sup>43</sup> In one particular study, which examined college sophomores taking a psychology exam, students who performed in the bottom quartile on a psychology test demonstrated this same pattern of an inflated sense of ability.<sup>44</sup> Though these students had actually scored in the twelfth percentile among their classmates, they estimated their mastery of course material to be in the sixtieth percentile and that they had performed in the fifty-seventh percentile on the exam.<sup>45</sup> Students at the top, on the other hand, underestimated their performance, believing they were more average than they were, although the discrepancy between actual performance and expectation was less stark. Students in the top quartile estimated their mastery of course material and performance on the exam to be in the eightieth percentile, while in reality they performed in the ninetieth percentile.<sup>46</sup>

38. David Dunning, Kerri Johnson, Joyce Ehrlinger & Justin Kruger, *Why People Fail to Recognize Their Own Incompetence*, 12 CURRENT DIRECTIONS IN PSYCHOL. SCI. 83, 85 (2003).

39. *Id.*

40. *Id.* at 83.

41. Sinkavich, *supra* note 34, at 77.

42. Justin Kruger & David Dunning, *Unskilled and Unaware—But Why? A Reply to Krueger and Mueller*, 82 J. PERSONALITY & SOC. PSYCHOL. 189, 189 (2002).

43. Dunning et al., *supra* note 38, at 84-85.

44. *Id.* at 83-84.

45. *Id.* at 84.

46. *Id.*

The lack of self-awareness among poor performers is a “double curse.”<sup>47</sup> A student who lacks the skill to perform well on the paper or exam would also lack the ability to evaluate the success of his performance.<sup>48</sup> That means that the weakest students, who lack the ability to distinguish between the standard exemplified by a model answer and their own work—will learn the least from a model answer. So the students who need feedback most for continued learning will get the least.

Much of the research on metacognition has required students to estimate their performance success without receiving external evaluation. In many of the metacognitive studies, students are given an exam or asked to perform a task and asked, essentially, “How do you think you did?” But perhaps a professor’s evaluation could override a student’s own metacognitive deficiencies. That is, if a professor tells the student he performed below the mean, perhaps the student will no longer misestimate his own capabilities. After all, the summative feedback of a low grade would indicate that *something* was wrong, even if it doesn’t indicate *what* was wrong.

Metacognitive research suggests, however, that if a person lacks the skills to perform well initially, he would also be unable to differentiate between his own or another’s right and wrong answers. Therefore, even after receiving external evaluation, a student might know that he scored fewer points on a given assignment than a model answer would have, but without further guidance, he might not understand why. To that student, having the right answer before him would not necessarily be educative.

Seeing higher-performing examples does not seem to improve a poor-performing student’s ability to self-evaluate. In one study designed to determine social effects on metacognition, researchers administered a test and then showed both high and poor performers a representative sample of work completed by their peers. The researchers theorized that the subjects might better evaluate their own capabilities after seeing the work of their peers. After reviewing the samples, high performers did improve the accuracy of their self-assessments. They were better able to calibrate their own ability after understanding the skill level of their peers without interference from false consensus. Poor performers were not. Despite reviewing a representative sample of their peers’ work—including tests that were superior to their own—poor performers continued to overestimate their own ability and performance.<sup>49</sup> Anecdotal evidence from

47. *Id.* at 84-85.

48. *Id.* I can offer an anecdote in support of this “double curse” phenomenon. A student who performed poorly on a real estate transactions exam had asked to review a sample. After reviewing the sample, the student complained that he had written the same things as the sample and he could not understand why he had received a lower grade. Indeed, he had touched on similar concepts and the two sets of answers shared a common vocabulary. But his application of the concepts lacked the depth of the sample and was incorrect in some places. However, because his understanding of the concepts was shaky, he could not see the nuanced differences between his own answer and the model answer.

49. Kruger & Dunning, *supra* note 42, at 191.

my first-year writing class—and from many other professors’ writing classes—supports the theory that reviewing stronger work may have no impact on a poor performer’s self-assessment. In my class, my first-year law students wrote a memorandum. They received individual, formative feedback in comments on their papers and summative feedback in the form of a grade in relation to the mean and median scores for the class. I then asked them to review a model memorandum, which they were told had earned a high grade. I asked them to compare their memorandum to the model, identifying strengths and weaknesses in their own work. The results were staggering.

A student who earned one of the lowest grades on the assignment wrote, “I do think my explanation of facts was a bit clearer than that of the model memo.” She identified the strengths of the model memo as (1) having clearer introductions to the analogical reasoning and (2) using better transition words, both of which were superficial differences between the papers. Though my individual feedback to her had focused on the accuracy and organization of the rule statement, the organization and completeness of the rule explanation, and the lack of a convincing connection between her case and the precedent cases, she concluded, “Transition words and improved organization in my analogical reasoning are the two main issues that I’m targeting in my next memo.”

The student who earned the lowest grade on the memo did a better job of identifying positive attributes of the model memo, but he did not successfully identify his own weaknesses based on that memo. First, he explained that the model memo was complete and well-organized. But then he wrote, “My citations would be my biggest criticism as I can only describe them as horrendous.” In fact, citation format was the only distinguishing feature he identified between his memo and the model memo. My comments on his paper had focused on the disorganization of the rule explanation, his faulty interpretation of the cases, and a lack of counteranalysis; citations were worth just two of thirty-five points on this assignment.

*b. The Disconnect Between Confidence and Feedback*

Confidence affects how much time a student will spend reviewing feedback. A student who is confident in his response will spend less time reviewing feedback on it than his less confident peers.<sup>50</sup> A student’s level of confidence might not correlate with actual knowledge, but could result from motivational and metacognitive states.<sup>51</sup> Coupled with the research about students’ abilities to self-assess, and understanding that their levels of confidence might not correlate with their actual performance success, a professor should aim to provide efficient feedback that does not require extensive study time for the student to absorb. However, in order to get feedback from a model answer, the

50. Raymond W. Kulhavy & William A. Stock, *Feedback in Written Instruction: The Place of Response Certitude*, 1 *EDUC. PSYCHOL. REV.* 279, 304 (1989).

51. *Id.*

student must read the model answer carefully, determine the strengths of that answer in order to identify the standard or goal sought, and then distinguish it from his own work. That inquiry would require significantly more study time than reading a professor's comments specific to the student's paper identifying strengths and weaknesses.

Unless feedback provides a sense of certainty and specificity beyond just the accuracy of the response, it can be counterproductive. Ineffective feedback can be debilitating.<sup>52</sup> Summative feedback, such as a grade or score, with only vague additional feedback, has a negative effect on learning.<sup>53</sup> Students who have to partake in information-processing activity to decode the professor's feedback may suffer from cognitive overload and decreased motivation.<sup>54</sup> Similarly, a student who feels uncertainty about his performance will be less motivated to learn.<sup>55</sup> In fact, a student who is mired in uncertainty will busy himself in efforts to alleviate the discomfort of uncertainty, which will distract him from employing effective learning strategies.<sup>56</sup> A model answer that a student cannot effectively decode is vague and may do nothing to alleviate the certainty a student feels. In fact, without the tools to distinguish between a model answer and one's own work, a student's sense of uncertainty may increase. Thus, he will not engage in self-guided learning when reviewing the model answer. It follows, then, that feedback that includes more specificity and provides greater certainty about the student's performance and steps for remediation would increase motivation and allow a student to learn more efficiently.

Adding to the problem of misplaced confidence is the related concept of perceptual fluency.<sup>57</sup> Perceptual fluency is the familiarity or ease one feels when material is presented to him.<sup>58</sup> A person can gain perceptual fluency with material just by repeated exposure to it; repeated exposure to a term will create the perception of knowledge of the term.<sup>59</sup> That repeated exposure is an example of superficial priming. For example, in a law school setting, a student studying for his contracts exam might gain repeated exposure to the term "illusory promise." That repeated exposure would create in the student a perceived sense of familiarity with the term. But that perceptual fluency is a subjective feeling that is not necessarily tied to an objective ability to identify situations where illusory promise exists, to explain the law relevant to illusory

52. Valerie J. Shute, *Focus on Formative Feedback*, 78 REV. OF EDUC. RESEARCH 153, 156 (2008).

53. *Id.*

54. *Id.* at 158.

55. *Id.* at 157.

56. *Id.* at 157.

57. Robert A. Bjork, *Assessing Our Own Competence: Heuristics and Illusions*, in ATTENTION AND PERFORMANCE XVII 443 (Daniel Gopher & Asher Koriat eds., 1999).

58. *Id.*

59. *Id.*

promise in that setting, or to argue coherently in favor of or against illusory promises or defenses.<sup>60</sup> So despite the repetition exposure, the student would not necessarily have a nuanced understanding of illusory promise or how it could be applied, despite feeling a sense of confidence that he does. Moreover, the student would be unaware that his perceptual fluency was attributable to superficial priming and not actual, internalized learning.<sup>61</sup>

*c. Mindset and Self-Efficacy as Barriers to Self-Evaluation*

Metacognitive deficiencies explain why poor-performing students might not be able to distinguish better answers from weaker ones. But perhaps it's not solely one's substantive knowledge that determines his ability to self-assess; perhaps our mindset creates another fault in the self-awareness landscape. In this context, mindset refers to our belief about intelligence and how skills are acquired.<sup>62</sup> Are intelligence and skill innate, or can they be acquired through effort? Our mindsets may vary from context to context; that is, one could believe that a person is either born a talented writer or not, while believing that he can become a better basketball player with training and practice.

*i. Growth vs. Fixed Mindsets*

In Carol Dweck's research on mindsets, she determined that mindset affects our ability to self-assess. First, she divides mindsets into two primary categories: growth and fixed.<sup>63</sup> A person with a growth mindset believes that her abilities can be developed through training and effort.<sup>64</sup> By contrast, a person with a fixed mindset perceives his abilities as fixed—he is either smart or dumb, capable or incapable.<sup>65</sup> As an example, a person with a fixed mindset might say, "I don't have a mind for numbers" and assume he will never be successful in math courses.

Students with a growth mindset are better able to accurately estimate their current abilities—even when lacking.<sup>66</sup> Perhaps because growth-mindset students believe that intelligence can be acquired through effort, they have less to lose in recognizing their own mistake or skill deficiency. For those students, those deficiencies reveal opportunities for continued learning and improvement. Therefore, they are open to, and possibly even excited by, the

60. *Id.*

61. *Id.* at 444.

62. See Sarah J. Adams-Schoen, *Of Old Dogs and New Tricks—Can Law Schools Really Fix Students' Fixed Mindsets?* 19 *LEGAL WRITING* 3 (2014).

63. CAROL S. DWECK, *MINDSET* 6-7 (2006). Dweck's categorization echoes the two categories of self-theory more commonly used in cognitive research—incremental and entity—such that entity theorists have fixed mindsets, and incremental theorists have growth or malleable mindsets. See *id.*

64. *Id.* at 7.

65. *Id.* at 6.

66. *Id.* at 11.

possible development they will enjoy as they identify the ways the model answer is better than their own work.

Students with a fixed mindset, on the other hand, tend to be less aware of their inadequacies.<sup>67</sup> Perhaps those with a fixed mindset tie inadequacy to innate, immovable inability, those students will be less open to the possibility that they need improvement. Accordingly, a student who is less able to recognize or admit to his weaker performance will not be able to improve his performance. Students with fixed mindset are also less likely to seek out new learning for fear that it might reveal a weakness.<sup>68</sup> Having a fixed mindset “makes looking and feeling proficient so important that it blocks the acquisition of true proficiency.”<sup>69</sup> And perhaps that seems obvious. With so much at stake for the students with fixed mindsets, who would perceive their own shortcomings as a life sentence, they would naturally defend, deflect, and distort to avoid recognizing their own inadequacy.<sup>70</sup> In practice, then, asking a student with a fixed mindset to compare his work against a model answer to identify his own shortcomings will be a waste of the student’s time, if he ever even looks at it.

Moreover, students with differing mindsets view the very purpose of testing differently. Those with a growth mindset are more likely to believe that testing is an opportunity for continued learning.<sup>71</sup> Students with a fixed mindset, on the other hand, perceive testing as merely a way to check knowledge and ability.<sup>72</sup> With conflicting perceptions of the very purpose of testing, one can imagine the two mindsets would process post-testing feedback in different ways. Students with a fixed mindset might be prone to review a model answer solely to confirm their own accuracy, whereas students with a growth mindset would engage in more effective self-regulated learning.<sup>73</sup>

This results in part from the idea that mindset seems to dictate a person’s attitude toward the effort of learning. Effort is a sign of inability for the fixed mindset, while those with a growth mindset believe that learning comes from effort, from struggling through challenges, and that being challenged is not a sign of inability.<sup>74</sup> Accordingly, more directed, individualized feedback that prompts a student to recognize his strengths and weaknesses—which a model

67. *Id.*

68. Carol S. Dweck & Allison Master, *Self-Theories Motivate Self-Regulated Learning*, in MOTIVATION AND SELF-REGULATED LEARNING 31, 48 (Dale H. Schunk & Barry J. Zimmerman, eds. 2008).

69. *Id.* at 35.

70. DWECK, *supra* note 63, at 11.

71. See Veronica X. Yan, Khanh-Phuong Thai & Robert Bjork, *Habits and Beliefs That Guide Self-Regulated Learning: Do They Vary With Mindset?*, 3 J. APPLIED RES. IN MEMORY & COGNITION 140, 146 (2014).

72. *Id.*

73. *Id.* at 146-47.

74. *Id.*

answer does not—would be more effective for students with a fixed mindset because they are less inclined to struggle through self-regulated study.

*ii. Self-Efficacy and Motivation*

Not only might a student with a fixed mindset misinterpret a comparison between a model answer and his own work because of that defensiveness, deflection, and distortion, or simply reject papers or exams as learning opportunities, students with a lower sense of self-efficacy are simply less capable of implementing the cognitive strategies necessary to self-assess using a model answer.<sup>75</sup> Self-efficacy is the belief in one's ability to accomplish a particular task. And a cognitive strategy is a technique that a student uses to monitor and control his cognitive processes.<sup>76</sup>

When a student uses cognitive strategies effectively, he can guide his own processing, which means he can take part in self-regulated learning. Self-regulated learning is learning for which the student takes the primary responsibility, generating the learning himself and replacing learning by instruction.<sup>77</sup> When a professor provides a student a model answer—expecting the student to determine the goal or standard, to measure the distance between the student's actual performance and the standard exemplified by the model answer, and determine the appropriate steps to close that gap—the professor anticipates that the student can take part in self-regulated learning.

But feelings of self-inefficacy—the student's belief that he is not able to complete a particular task—can lead to motivation problems, which can impede efficient use of cognitive strategies that allow self-regulated learning.<sup>78</sup> Self-efficacy is influenced in part by a person's experiences, including academic experience.<sup>79</sup> Law students might arrive at law school with a heightened sense of self-efficacy as a result of past academic successes. But our self-efficacy continues to evolve, and for some students, the difficulty of law school can affect their self-efficacy. For example, a student who earns a low grade on an early paper or a midterm exam might change his conception of his own competence. His present failure will diminish his belief that he can accomplish similar subsequent tasks.

Self-efficacy is tied to motivation, and motivation is key in self-regulated learning; students who are highly motivated are more capable of self-regulation than students with lower motivation.<sup>80</sup> Therefore, a student who believes he

75. SMITH & RAGAN, *supra* note 9, at 253.

76. *Id.* at 244.

77. *Id.*

78. *Id.*

79. Frank Pajares, *Motivational Role of Self-Efficacy Beliefs in Self-Regulated Learning*, in MOTIVATION & SELF-REGULATED LEARNING III, 115 (Dale H. Schunk & Barry J. Zimmerman, eds. 2008).

80. Barry J. Zimmerman & Dale H. Schunk, *Motivation: An Essential Dimension of Self-Regulated Learning*, in MOTIVATION & SELF-REGULATED LEARNING, *supra* note 79 at 1, 2-3.

is a bad learner will feel less motivated, and will therefore be less likely to expend the energy to accurately self-evaluate. So a student who has tied his self-esteem to academic success but falls short of such success will make less effective use of a model answer, at least without external input and prompting. Similarly, a student who attributes his academic successes and failures to external factors—a bad professor, an unfair test, faulty instructions for a paper assignment—instead of to his own cognitive abilities will be less likely to employ those learning strategies that would allow him to accurately self-evaluate.<sup>81</sup> A student who believes outcomes result from internal causes that are within the student's control and are changeable will be more motivated to self-regulate, and can therefore better self-assess.<sup>82</sup>

By contrast, students with a higher sense of self-efficacy, who also demonstrate generally higher self-esteem, are better able to employ those cognitive strategies that allow them to engage in self-regulated learning and self-assessment.<sup>83</sup> Students with a higher sense of self-efficacy work harder, are more persistent, and are better at self-reflection.<sup>84</sup> They are more likely to work through difficult problems and rework problems they initially solve incorrectly. For those students, a model answer might provide more meaningful feedback, even without additional input or instruction.<sup>85</sup>

A student with lower self-esteem may have a harder time self-assessing based on a model answer, and the same answer itself can actually spur those feelings of low self-esteem. When students receive normative feedback that compares them with others, which a model answer surely does, the poorer-performing students tend to lose confidence and motivation.<sup>86</sup> Their sense of self-efficacy is depleted by comparisons with their peers. They blame their performance on inherent inability, predict that they'll perform poorly going forward, and lose motivation for later tasks. Feedback that referenced the student's individual efforts, however, had less of an effect on a student's self-esteem and motivation. Thus, the ineffectiveness of the model-answer feedback continues to spiral.

81. SMITH & RAGAN, *supra* note 9.

82. Zimmerman & Schunk, *supra* note 80, at 17-18.

83. *Id.* at 10-11.

84. Pajares, *supra* note 79, at 119-20.

85. In addition to internal sources of motivation, the context in which a student is reviewing a model answer will likely affect his motivation. In the contexts at issue in this article, the student reviews a sample *ex post facto*. The student in this scenario has completed the exam or project and has received a grade, and is reviewing a model answer to make sense of a grade or his progress. That is a significantly less motivating position than a student who has a project or exam still before him. A student who is seeking feedback with no opportunity for an improved grade or score might feel less motivated to engage in self-regulation that allows him to persist and work through difficult problems than, for example, a student who reviewed model answers before taking the exam or completing the project.

86. Avraham N. Kluger & Angelo DeNisi, *The Effects of Feedback Interventions on Performance: A Historical Review, a Meta-Analysis, and a Preliminary Feedback Intervention Theory*, 119 *PSYCHOL. BULL.* 254, 267 (1996).

A student with a lower sense of self-efficacy will be less capable of the self-regulation required to make meaning of the model answer, and reviewing the model answer increases the student's sense of self-inefficacy.

*2. A Model Answer Does Not Effectively Convey Formative Feedback*

The effectiveness of a model answer as a method of providing feedback depends largely on the instructional goal. While the specific goals of any particular class may differ, the overall goal of law school is to train students so that they can competently practice law.<sup>87</sup> For that goal to be achieved, law school graduates must be able to apply the knowledge they obtained in law school in a real-world setting in different factual contexts, which requires higher-order thinking.<sup>88</sup> Within that broader goal, some courses include among their goals that students know “the law,” which is factual knowledge.

At the very least, no matter the instructional goal, formative feedback should contain the correct answer or demonstrate how performance could have been improved.<sup>89</sup> A feedback message to a student should tell the student not solely whether he was correct or incorrect, but how to remediate his knowledge or skills.<sup>90</sup> A model answer as the sole feedback message can provide correct answer feedback in some circumstances, but in most circumstances it cannot provide guidance for skill remediation or continued learning. A model answer indicates to a student that there is a single correct answer to a problem.<sup>91</sup> In some evaluative contexts, such as testing declarative knowledge or identifying concepts, this assumption might be appropriate. But with more complex problems that test a student's higher-order thinking, the single-answer assumption of a model answer is both incorrect and problematic.

A model answer is best-suited for short-answer questions that test factual knowledge or very short problem-solving exercises in which student action is limited to naming or identifying. In those contexts, a student can determine whether he was correct or incorrect by determining whether his answer matches the model answer. And for those types of exercises, model answers might even yield better results than individualized feedback. In one study, first-year biology students were given twenty short-answer, factual-knowledge questions; they received model-answer feedback for ten questions and individual feedback for the remaining ten questions.<sup>92</sup> On a post-test several weeks later, students

87. Schwartz, *supra* note 2, at 385.

88. Higher-order thinking is required for learning complex skills like analysis, evaluation, and synthesis, as compared with less complex learning, such as learning facts or concepts.

89. See Andrew C. Butler, Namrata Godbole & Elizabeth J. Marsh, *Explanation Feedback Is Better Than Correct Answer Feedback for Promoting Transfer of Learning*, 105 J. EDUC. PSYCHOL. 290 (2013) (reviewing the wealth of studies comparing correct-answer feedback to the more basic verification feedback, which simply tells a student whether he was right or wrong).

90. See *id.*

91. Handley & Cox, *supra* note 28, at 22.

92. Huxham, *supra* note 27, at 604.

performed better on questions relating to topics for which they had received model-answer feedback.<sup>93</sup>

In a law school course, then, model answers could be an appropriate method of providing feedback when the professor seeks to assess factual knowledge or the ability to identify concepts. For example, on a law school exam, a professor might require students to identify the elements of the crime of burglary; that question tests factual knowledge. A model answer that correctly identified the elements of the crime would be instructive for the student who had answered incorrectly. Model answers would improve the students' grasp of those elements going forward.

But with assessment that requires higher-order thinking, where students are required to demonstrate a thought process, it might not be as effective. For example, an assessment might require students to recognize burglary as a possible charge based on facts, to synthesize authorities to develop rules for key elements, and to apply those rules to the current facts. That type of assessment requires higher-order thinking. Reviewing a model answer will not improve their understanding of the material or their skills. They may be no better at spotting issues, synthesizing rules, and applying rules than before the feedback.

If the professor's goal in evaluating a student's work is to provide formative feedback on problems that require higher-order thinking, merely providing a model answer is ineffective for many students. As discussed above, formative feedback must meet three conditions to be effective: A student must (1) understand the goal or standard aimed for; (2) compare his actual level of performance against that goal or standard; and (3) understand how to take appropriate steps toward closing the gap.<sup>94</sup> A model answer could, theoretically, identify for the student the goal or standard he was aiming for. After all, it provides a model of effectiveness: The model product achieved the learning objectives in an exemplary fashion. But a student who lacks adequate knowledge is not well-equipped to determine what made the model answer effective or ineffective. He might not have understood the learning objectives, nor can he determine how they were applied in the model. Thus, the first criterion is not met.

If the first criterion is not met, then the second cannot be met, either. If a student cannot identify the standard or goal, he cannot accurately gauge his performance against it. But even if the standards and goals were clear from the model answer, such that the first criterion were met—perhaps through detailed annotations highlighting the model answer's strengths—the second criterion might still not be met. As discussed above, most students lack the ability to accurately compare their performance against the standard without external feedback. Without an accurate understanding of the gap, a student then

93. *Id.* at 606-08. Students who received *both* types of feedback—individual and model—achieved the best result. *Id.*

94. FEEDBACK FOR LEARNING, *supra* note 11, at 34.

cannot independently determine the appropriate steps to take for continued improvement.

Moreover, while correct-answer feedback, which could come in the form of a model answer, will improve a student's factual knowledge, it by itself will not improve higher-level comprehension of the material.<sup>95</sup> Countless researchers have tested the value of correct-answer feedback versus elaborative feedback (which provides the correct answer together with either an explanation of why the correct answer is correct or a restatement of the original course material from which the answer was drawn).<sup>96</sup> Interestingly, researchers have repeatedly found that students who receive corrective feedback do no worse on retests than students who receive elaborative feedback.<sup>97</sup> Students receiving both types of feedback seem equally capable of improving their performance when retested on the same material, responding to the same test questions as on the first test. But the additional feedback information in elaborative feedback helps a student move beyond superficial knowledge to a deeper understanding of the material.<sup>98</sup> Having a deeper understanding of the material will better allow that student to transfer his knowledge to a new context.<sup>99</sup>

Therefore, applying these findings to law schools, where the primary instructional goal is to teach students the skills to apply the knowledge they learned in law school in new settings with different facts, student growth requires elaborative feedback. A lawyer who learns merely to recall or identify facts would be an incompetent practitioner.

### 3. *Student Satisfaction with Models as Feedback*

Students clamor for examples, but are they actually satisfied when a professor provides one? And should students be satisfied? Are the professor's learning goals of the course being met?

Despite the frequency of student requests for model answers, students who receive model answers as a feedback method are generally disappointed.<sup>100</sup> In fact, subjects in one study who received model answers after taking an exam ranked the model answer dead last—least useful—on a list of best feedback methods.<sup>101</sup> Students wanted materials that helped them improve their critical-

95. Butler et al., *supra* note 89, at 291.

96. *Id.*

97. *Id.*

98. *Id.*

99. *Id.*

100. Handley & Cox, *supra* note 28, at 27.

101. *Id.* at 31. In this study, model answers ranked below all of the other proposed forms of feedback designs for problem-based questions: Real-world examples of the principle, which describe the situation, the intervention, and the outcome; a description of how an expert would work through the problem; key dos and don'ts; a video showing consequences of several problem interventions; an explanation of the underlying issues behind the problem; a video of an expert comparing the pros and cons of several problem interventions; a

thinking skills, identify issues, and understand behaviors to pursue and avoid.<sup>102</sup> The model answer, which presented simply an ideal final product, did not help with those goals.

In another study, students found model answers “near intolerable and frustrating” as feedback on written exams because they wanted the opportunity for individualized clarification.<sup>103</sup> When feedback messages are complex, as they would be on a project that assessed higher-level learning, students needed a professor to help them decipher them.<sup>104</sup> And in a final study, only eleven percent of students reported that they preferred model feedback over individual feedback.<sup>105</sup> In that study, most upper-level students preferred model-answer feedback combined with individual comments, while the lower-level students preferred personal feedback alone.<sup>106</sup> Students seek verification and assessment from feedback, which a model answer on its own does not convey.<sup>107</sup> A model answer will merely demonstrate one good performance, but will not show a particular student what he did wrong or how to improve. The students in this study perceived that individual feedback provided personalized guidance that would allow for individual growth. Interestingly, among those students who preferred a model answer as feedback, thirty percent identified poor handwriting as the primary reason for their preference. Another group preferred a model answer because it “gives fast feedback.”

Most students seek a more concrete resolution than a model answer can provide. Some prefer feedback that presents alternative perspectives and others want to know which behaviors to *avoid*.<sup>108</sup> A model answer can, at best, merely tell a reviewer what to *do*. Less experienced learners want to know when their answer is wrong because they typically lack the expertise and self-confidence to assess themselves.<sup>109</sup> Higher-performing learners with greater expertise may be more comfortable with the ambiguity of a model answer because they are better able to self-assess. But given that the number of students in a course who gain sufficient expertise to accurately self-assess is typically pretty low, a model answer as feedback is insufficient.

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description of the formal, best-practice intervention; a video of peers debating the merits of several problem interventions. *Id.*

102. *See id.* at 21.

103. Jennifer Perera, Nagarajah Lee, Khin Win, Joachim Perera & Lionel Wijesuriya, *Formative Feedback to Students: The Mismatch Between Faculty Perceptions and Student Expectations*, 30 *MED. TEACHER* 395, 397 (2008).

104. *See* Richard Higgins, Peter Hartley & Alan Skelton, *Getting the Message Across: The Problem of Communicating Assessment Feedback*, 6 *TEACHING IN HIGHER EDUC.* 269, 272 (2001).

105. Huxham, *supra* note 27, at 606.

106. *Id.* at 607.

107. *Id.* at 607.

108. *See* Handley & Cox, *supra* note 28, at 29.

109. *Id.* at 33.

Students like text specificity. They want comments that relate to the assignment they've worked on rather than generalized comments. Moreover, they like student specificity. They want comments that are directed to that particular writer and not to a group of writers with similar problems.<sup>110</sup> They like in-depth explanations that offer an explanation of the problem, rather than a comment that simply identifies a problem.<sup>111</sup> And they want an example of how the problem can be fixed to give them direction for going forward.<sup>112</sup>

Model answers don't align with a student's goals and expectations for feedback, and what's more, providing a model answer as formative feedback rarely aligns with the course's learning goals. Students admit that they use model answers to verify existing knowledge rather than to expand or improve their knowledge.<sup>113</sup> Exam-takers find model answers most useful for "verifying and reinforcing existing knowledge" rather than facilitating new knowledge or introducing a new perspective. Though some students will use them to "tune" their knowledge and modify the way they think, the majority of students reviewing a model answer after taking an exam perceive it as a confirmation tool. Thus, a professor's goal in providing a model answer as formative feedback—to give the student a model answer from which to grow and expand his knowledge—will align with the perceptions of only a minority of students.

#### **IV. MAKING BETTER USE OF MODEL ANSWERS AS FEEDBACK**

Model answers are, on their own, of questionable value for providing formative feedback. The most important feedback is impossible to provide by way of a model answer, students don't know how to self-assess their own work against the model answer, and the student's mindset might prevent him from using a model answer for anything other than confirmation. Even so, model answers can still be an important pedagogical tool in a professor's toolbox. Part IV of this article suggests several methods for using model answers to give feedback that best promote student learning: (a) providing an annotated model answer together with individualized feedback; (b) creating opportunities for remediation and reassessment for students after they have reviewed model answers; (c) using a student's own work as a model answer; (d) requiring students to review model answers in small groups instead of individually; (e) providing multiple sample answers for review, including both strong and weak samples; and (f) focusing on metacognitive skills throughout so that students can better self-evaluate against model answers. Some of these suggestions will work better for exams and others for papers.

110. Anne Enquist, *Critiquing Law Students' Writing: What the Students Say Is Effective*, 2 J. LEGAL WRITING INST. 145, 189 (1996).

111. Perera et al., *supra* note 103, at 396.

112. Enquist, *supra* note 110, at 161-62.

113. Handley & Cox, *supra* note 28, at 29.

*A. Providing Annotated Model Answers Coupled with Individualized Feedback*

For a model answer to provide a meaningful representation of the goal or assignment, it should be annotated. An annotated sample tells the student not just what a good exam or good paper looks like, but why it's good. Many professors use margin comments to annotate a model answer so that students can gauge what the professor thought about and valued as she read (or composed) the answer. Those annotations will act as a guide through the document, offering students insights into its organizational, analytical, and mechanical strengths.

In annotating a model answer, a professor should be conscious of the learning objective of the task and should identify that clearly.<sup>114</sup> The learning objective should have been made explicit before students wrote the paper or took the exam, as should the reason the learning objective was met in the model answer. Was the learning objective to identify the elements of a claim? Or to create well-structured analogical reasoning? Or to select the correct facts for application? Rather than simply annotating a model answer with "Here, the student applied the law well," a professor should describe what specifically made the rule application exemplary. For example, "This application is successful for three reasons. First, the facts explained in the case illustrations are discussed in logical order here, following the order of the explanation above. Second, the writer has compared and contrasted those facts to the legally relevant facts in his own case. Third, the organization of the analogical reasoning is clear and logical; the writer has started each comparison with a statement of the point of the comparison, restated the facts from the precedent cases and introduced the facts from his case, explained why they are similar, and explained the legal significance of that similarity."

A thoughtfully annotated model answer will better help a student compare his work against the goal or standard. Whereas an unannotated model answer requires a student to fend for himself in figuring out what made an answer weak or strong, margin comments leave less room for error or misinterpretation. Further, because he'd be on notice of the learning objectives and the basis of a professor's evaluation, a student comparing his own work against the annotated model answer might better see beyond the superficial differences between the two documents, which might not be obvious to a novice reader.

Nevertheless, as discussed above, many students—particularly lower-performing students—cannot adequately distinguish their work from a model answer. In those cases, even though the standard or goal had been clearly identified by the model answer and its annotations, the students could not properly gauge the distance between their actual work and the model. Thus, the feedback from the model answer is not effective. Therefore, a model answer should be paired with individual comments on a student's work to provide more effective formative feedback. However, using a model answer as a reference point in the individual comments can make individual commenting

114. FEEDBACK FOR LEARNING, *supra* note 11, at 34.

more efficient. A professor can simply instruct students to review a particular portion of the model answer to put an individual comment into context, rather than rewriting a suggested revision on paper after paper.

The individual comments on the student's work should mirror those on the model answer, identifying areas where the standards were and were not met. That is, if the model's annotations focus on rule application, so should the individual comments on the student's work. If the model's annotations and the student's individual comments seem to prioritize different aspects of the work, a student might be confused, and rightfully so. For example, a student whose paper contained weak analysis and received a significant number of comments on grammar and mechanics might interpret the difference between his work and the model work as mechanical.

### *B. Creating Opportunities for Continued Remediation and Reassessment*

When professors provide model answers, they can engage in efforts to remediate and reassess.<sup>115</sup> In most contexts, as with large lecture classes or after a final exam, professors cannot spend significant teaching time to remediate or reintroduce course material. Nor can most professors provide a formal reassessment opportunity on the same assignment.<sup>116</sup> But professors can create micro-opportunities for remediation and reassessment through model-answer review and dialogue. Rather than simply handing a model answer off to a student to review passively, a professor can create tasks for the student to engage in during his review of the model answer. For example, a professor can ask the student to explain each of the errors in his own product, which requires the student to think critically about the course material and his own product. In addition, a professor might ask the student to list the skills he failed to demonstrate,<sup>117</sup> focusing the student on the broader learning objectives of the course, which promotes transfer.

Those tasks help to create a dialogue between professor and student, as the professor comments on the student's paper or exam and the student responds to the comments. They'll also provide a helpful starting point for a discussion about the student's work. Upon reviewing a student's corrections and perceived skill deficits, the professor can better gauge his knowledge and understanding of the course's objectives and can remediate by giving the student guidance for closing the gap between his actual performance and the standard. Individual conferences would be time consuming, but less so if students and the professor arrived to the conference with a clearer sense of the student's needs.

115. See Schwartz, *supra* note 2, at 420.

116. See *id.* at 406-08 (discussing deficiencies with law school examinations as a means of assessment).

117. *Id.*

### C. Using a Student's Own Work as an Example

In an area where a student has struggled once but perhaps has been more successful elsewhere, pointing to the student's own more successful work as a model can be effective.<sup>118</sup> For example, if a student faltered in applying the rule to facts on one issue, but applied the rule to facts successfully in another part of his writing, the professor could point to the latter portion as an example of how to improve the former. A student might be better able to see the difference between the weaker and stronger point when they're both in his own words, and might feel better-equipped to correct the problem. Using the student's own stronger work as an example of how to fix the problem will give the student confidence that he has the tools to improve.<sup>119</sup> Of course, this solution does not yield the efficiency of providing a single model answer, as each model would have to be mined from the individual student's work.

### D. Requiring Small-Group Review of Model Answers

While individuals may have limited success with model answers, groups of students may make better use of them. Group review doesn't necessarily coincide with the typical law school culture or review context, but it could be an effective way to provide students with feedback. In a typical review context, a lone student who has questions about his grade will ask his professor for a model exam or model essay to compare against his own work. To control the dissemination of the exam and the model answers, the professor might check out a model exam to that student for a short window of time or even ask him to review it in the professor's office.

But knowing that the student will make limited use of model answers on his own, a professor might instead schedule windows of time for small groups of students to review the models and their own exams together. A group of students working through model answers and one another's work (perhaps even assisted by guiding questions from the professor as discussed above) will better identify the standards or goals of the assignment and can better distinguish their work from the model than an individual student could. Of course, creating small exam-review groups requires some coordination on the professor's part and an openness about grades that many law students do not typically demonstrate.<sup>120</sup>

### E. Providing Multiple Annotated Sample Answers

Providing multiple model answers of student work can help dispel the common notion that there is but one way to produce effective legal writing or answer an exam question—a secret for students to decode. Students can see that writers can make different organizational and analytical choices but still

118. Daniel L. Barnett, *Triage in the Trenches of the Legal Writing Course: The Theory and Methodology of Analytical Critique*, 38 U. TOL. L. REV. 656, 669 (2007).

119. *Id.*

120. Schwartz, *supra* note 2, at 417.

create an effective final product.<sup>121</sup> A professor might also reassure students that she didn't favor a single answer or way of writing the answer by providing multiple sample answers—that grades weren't determined by whether a student wrote “what the professor wants.”<sup>122</sup>

A professor might consider posting a sample effective answer and a sample ineffective answer, both with annotations, to model the work of contrasting for students. Allowing a student to review a weaker sample together with a stronger sample might better enable students to identify the strengths of the stronger sample.<sup>123</sup> In fact, some legal writing textbooks have already begun providing multiple samples for their readers.<sup>124</sup> Stronger students in particular would benefit from the opportunity to review multiple samples, because their ability to self-assess seems to improve with additional exposure to the work of their peers.<sup>125</sup>

#### *E. Teaching Metacognitive Skills Throughout the Course*

Though most of the suggestions in this article for more effectively using a model answer suggest pairing a model answer with additional feedback, a model answer on its own can be effective for students with better-honed metacognitive skills. Fortunately, we are not sentenced to life as metacognitive “haves” and “have nots”; metacognitive skills can be taught. A professor who proactively teaches metacognitive skills throughout the course can give students the tools to better self-assess. And students who improve their metacognitive skills—essentially learning how best to learn—can learn to self-evaluate against a model answer.

In addition to teaching students the doctrine and skills most commonly taught in law school, law professors can focus students on the metacognitive tasks associated with learning to improve their skills.<sup>126</sup> For example, when a professor begins a new unit of instruction, she can encourage students to step back from the substance and consider the steps to acquiring new knowledge: What are their learning goals, and what strategies must the student employ to

121. Christine N. Coughlin, Lisa T. McElroy & Sandy Patrick, *See One, Do One, Teach One: Dissecting the Use of Medical Education's Signature Pedagogy in the Law School Curriculum*, 26 GA. ST. U. L. REV. 361, 388-89 (2010).

122. *Id.* at 392.

123. *Id.* at 389.

124. *See, e.g.*, CHRISTINE COUGHLIN, JOAN MALMUD ROCKLIN & SANDY PATRICK, *A LAWYER WRITES* (2d ed. 2013). Professors Coughlin, Rocklin, and Patrick include three annotated samples of the same legal memorandum, allowing students to compare and contrast different approaches to the same problem. And in a particularly innovative step, they include a less effective sample of the same memorandum. Their annotations explicitly contrast the less effective sample with the more effective samples to show why one rule explanation was more effective than another, why the organization was clearer one way than the other, and so on.

125. Dunning et al., *supra* note 38, at 85.

126. Leah M. Christensen, *Enhancing Law School Success: A Study of Goal Orientations, Academic Achievement, and the Declining Self-Efficacy of Our Law Students*, 33 LAW & PSYCHOL. REV. 57, 82 (2009).

achieve that goal?<sup>127</sup> Focusing students on their own metacognition in addition to the traditional course content will promote transfer and self-regulated learning.<sup>128</sup>

An increased focus on metacognitive skills in law curriculum doesn't just open up the possibility of using model answers, of course. Teaching metacognitive skills in law schools responds to the ABA's requirement that students gain competency in such skills as self-evaluation in order to be competent and ethical lawyers.<sup>129</sup> However, the practicality of incorporating metacognitive training into the traditional law school curriculum is outside the scope of this article.<sup>130</sup>

### CONCLUSION

While model answers can provide a helpful learning tool for students in some contexts, model answers are not a particularly effective method for conveying formative feedback. Metacognitive barriers and other student characteristics cause many students to distort the message in a model answer or misunderstand their own work in relation to the model answer. That means that, typically, while even strong students will struggle with model answers, the students who perform least well on assessments—and who therefore need feedback most—will get the least from a model answer. While there is value in requiring students to take part in self-regulated learning, those opportunities should come in addition to and not in place of meaningful formative feedback.

127. Anthony Niedwiecki, *Teaching for Lifelong Learning: Improving the Metacognitive Skills of Law Students Through More Effective Formative Assessment Techniques*, 40 CAP. U. L. REV. 149, 161 (2012).

128. *Id.* at 161.

129. *Standard 302 and Interpretation 302-1*, in STANDARDS AND RULES OF PROCEDURE FOR APPROVAL OF LAW SCHOOLS, *supra* note 18, at 15-16.

130. *See* Niedwiecki, *supra* note 127.